

CHAPTER 4: PROJECTIONS

INTRODUCTION

Managing future growth and development requires an understanding of just how much future growth and development to expect. While economic conditions, changes in personal living preferences, and other variables will ultimately influence the amount of development that Franklin County will receive by the year 2025, the prevailing trends can give a good estimate of what can be expected. These projections for population and employment growth and the amount of land that growth will likely consume will form the basis for the future land use, transportation, and community facility plans.

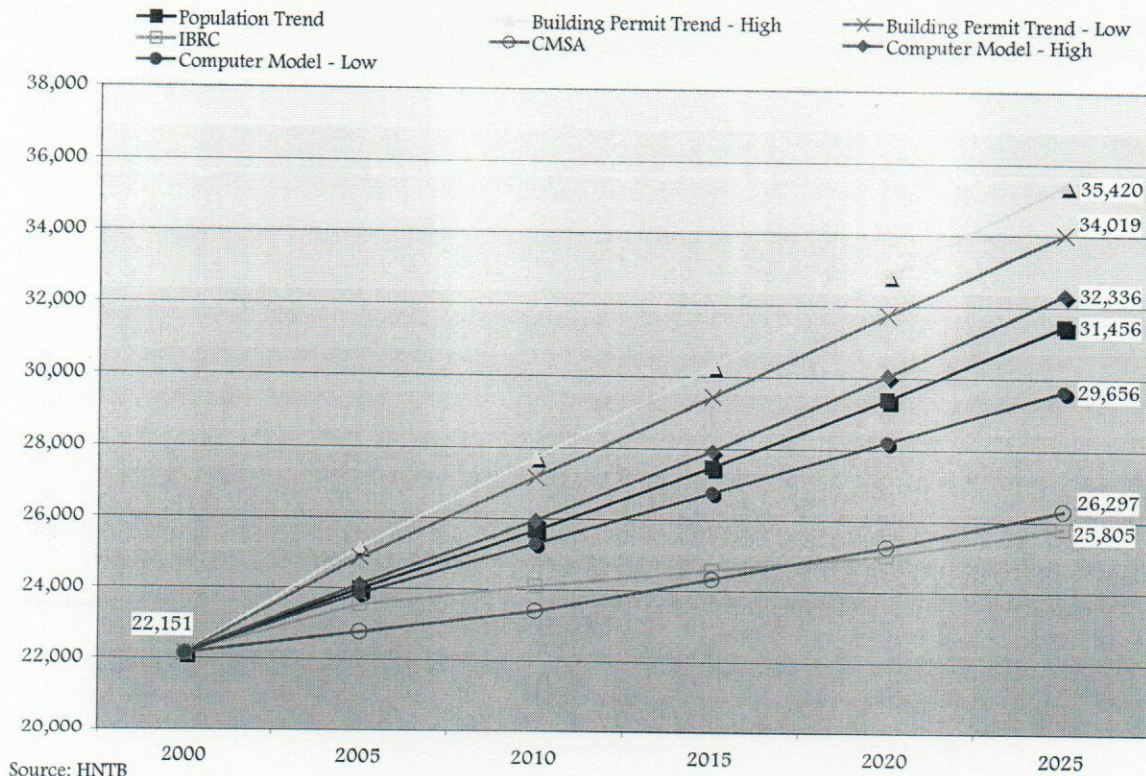
POPULATION PROJECTIONS

There are several methods available for projecting future growth. No one technique is guaranteed to be any more accurate than another, so five methods were employed to forecast possible future growth scenarios for Franklin County.

1. **Population Trends:** This line assumes that Franklin County will continue to grow at approximately the same rate it has grown over the past decade (approximately 1.37% per year).
2. **Computer Modeling:** Computer models also use past population trends, but they account for the fluctuations in the growth rate. Two different computer modeling techniques were used. The high projection uses the change in population in Franklin County from 1990 to 2000 and projects the population exponentially. The low projection uses the population from 1995 to 2000 and projects it linearly. The use of two different starting dates reflects the possibility of the county growing as fast as it has in the past five years, or at a slightly slower rate, reflected over the entire decade.
3. **Building Permit Trends:** Again, two building permit trends are shown, one which projects the average rate of building since 1990 and one which projects the average rate of building since 1995. Building permit trend projections are generally the highest projections for several reasons. First, some of the permits issued are for persons already living in the County and building a new home. Others may never build after receiving the permit. Finally, these projections include mobile and manufactured housing which may be replaced more frequently than traditional housing.
4. **CMSA (Cincinnati Metropolitan Statistical Area):** The CMSA projection assumes that Franklin County's growth is a result of the growth of the Cincinnati region and that the County will grow as the region continues to grow. It also assumes that as people move away from Cincinnati and into rural areas, Franklin County will receive an increasingly larger share of that population. The projections are derived from the projections for the CMSA done by the Hamilton County Regional Planning Commission and Rural Zoning Commission.
5. **IBRC (Indiana Business Research Center):** The IBRC is seen as an expert in Indiana for population statistics. Their projections are based on the US Census Bureau projections for the State of Indiana. The IBRC figures are generally very conservative and are therefore the lowest of the projections.

The “high building permit trend” forecast produced the highest future population. According to this projection, by the year 2025, Franklin County can expect a population of approximately 35,420 people, a 60 percent increase from the year 2000 population of 22,151. Because it is generally better to plan for more population growth than may actually occur than to be conservative and not plan for enough growth, the Franklin County Steering Committee chose this high growth projection as the basis for the recommendations of this plan.

FIGURE 4.1: POPULATION PROJECTIONS



HOUSING PROJECTIONS

From a land use planning perspective, absolute increased population is less meaningful than the impact of population change upon housing development, demand for retail goods and public services and land consumption. Therefore, forecasts of population are used to establish a growth rate that in turn is used to allocate housing units and determine the amount of land needed to support those housing units.

In order to project the amount of land required to house the future population, the following formula is used:

$$\text{POPULATION GROWTH} / \text{PERSONS PER HOUSEHOLD} \times \text{AVERAGE HOUSING DENSITY}$$

Therefore, if the future population will be 35,420, and the existing population is 22,151, Franklin County can expect 13,269 additional people by the year 2025.

In order to complete the first step of the equation, a future "persons per household" figure is required. According to the United States Census Bureau, the average persons per household will continue to decline until it reaches approximately 2.53 by the year 2010. Franklin County's average persons per household has always been slightly higher than the national average. In 1990, the persons per household figure for Franklin County was 2.95, while the National Average was 2.61. If Franklin County continues to have an average persons per household figure approximately 13 percent higher than the national average, the number of persons per household for Franklin County in 2025 will be approximately 2.66. Therefore, if the average household size in 2025 is 2.66, the 13,269 additional people will live in approximately 4,988 homes.

Finally, assuming that the average housing density permitted in Franklin County is one dwelling unit per one acre of land, those 4,988 homes will require 4,988 acres of land. While housing densities will vary across the County, a one dwelling unit per acre density was used as an average and for ease in calculations.

In summary, by the year 2025, Franklin County can expect an additional 13,269 people. Those people will require approximately 4,988 acres of land on which to build their homes. Therefore, Franklin County can expect to see nearly 5,000 acres of land converted from farmland or wooded areas to residential development. While this number seems large, in context, 5,000 acres is equal to 7.8 square miles, or 2 percent of the County's total land area.

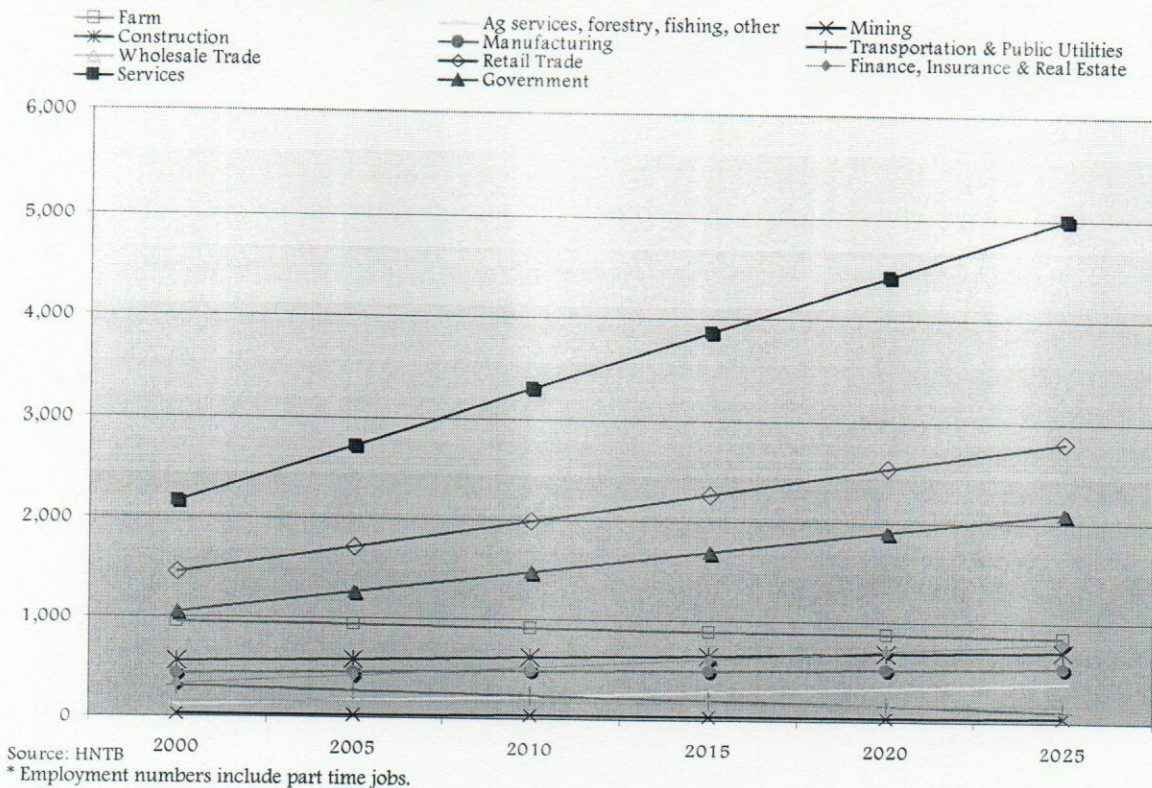
EMPLOYMENT PROJECTIONS

Future employment and the land new commercial and industrial buildings will require is computed in a similar way to calculating future housing needs. The existing growth trends of different industries are projected into the future, assuming they will continue to grow at approximately the same rate at which they have recently grown. The result is a projection of the number of jobs that can be expected to be provided by each industrial sector in the year 2025.

Next, existing land use trends are used to project the amount of land needed to accommodate new employment growth. The following generalizations are made when making these projections:

- retail, services, and finance, insurance and real estate uses are expected to occupy commercial buildings;
- manufacturing and wholesale are expected to occupy industrial buildings;
- government and transportation, communication and utilities are expected to occupy buildings classified on the land use map as public/semi-public; and
- farming, agricultural services (including forestry and fishing), mining, and construction do not generally require large buildings or infrastructure improvements.

FIGURE 4.2: EMPLOYMENT PROJECTIONS



Because it is known how many jobs there are in each sector today and how much land those businesses are using, the existing employee to developed land ratio can be used to determine how much land will be necessary in the future. The following figures were used to determine the amount of land needed for future commercial and industrial development.

FIGURE 4.3: LAND AREA DEMAND BY LAND USE TYPE

Number of Jobs		Projected Employees (2025)	Employees per Acre	Acreage Required (2025)
Commercial	Retail	2,798	13.79	623.6
	Services	5,000		
	FIRE ¹	803		
Industrial	Manufacturing	550	2.98	238.9
	Wholesale	163		
Public/Semi-Public	Government	2,100	3.48	636.7
	TCU ²	117		
Other	Farm	850	NA	NA
	Agriculture Services ³	398		
	Mining	49		
	Construction	713		

¹ FIRE: Finance, Insurance and Real Estate

² TCU: Transportation, Communication and Utilities

³ Agriculture Services includes forestry and fishing

Commercial Land Uses

Commercial land uses include retail (i.e. grocery stores, clothing stores), services (i.e. restaurants, day care, doctors' offices), and finance, insurance and real estate offices. As was noted in Chapter 2, the service industry is the fastest growing sector of Franklin County's economy. This trend is projected to continue to 2025, resulting in an additional 2,845 service industry jobs.

Retail is the second fastest growing sector of the economy. The expansion of retail development in Franklin County over the next 24 years is expected to provide an additional 1,357 jobs.

Finance, insurance and real estate, while a smaller sector of the overall Franklin County economy, is projected to grow by 140 percent. This sector is expected to provide a total of 468 new employees by the year 2025.

Each of these three sectors of the economy generally use commercial style buildings for their operations. If commercial building styles do not substantially change by the year 2025, these additional 4,670 commercial jobs will require an additional 339 acres of land. Much of this acreage will be provided within the existing city and town limits. However, many large scale new developments are likely to seek larger tracts of land in the County.

Because these projections are based on the circumstances present in the year 2001, County policy or a change in the buying habits of Franklin County residents could influence the figures listed above. Currently, many Franklin County residents obtain retail goods and services outside of the County near their place of work or along their commute. However, Franklin County has discussed as part of this planning process promoting further economic development. If successful, the result would be more jobs within Franklin County. A decrease in the percentage of people leaving the County for work and/or an increase in the number of people working in Franklin County and living elsewhere could influence buying decisions and cause more retail and service purchases to occur within the County, thus creating a need for even more commercial land than is provided for above.

Industrial Land Uses

Manufacturing operations and wholesale trade are classified as industrial land uses. The manufacturing sector of Franklin County's economy has shown only minimal growth over the past decade. Therefore, the projections to the year 2025 are conservative, forecasting an additional 112 employees. Wholesale trade also shows low growth, adding only 7 employees by the year 2025, making it the third smallest sector of the County's economy.

One of the goals of the Comprehensive Plan is to stimulate economic development in Franklin County, and manufacturing and wholesale uses are among those that the County wishes to attract. Such uses would increase the tax base, provide local jobs, and potentially attract more commercial spending by employees who live in other counties. Therefore, the land requirements for industrial uses may be too conservative for the County's goals, and more land should be provided.

Furthermore, industrial uses require very specific land characteristics upon which other uses are not as dependent. Industrial development requires access to transportation (interstate and/or railroad), large tracts of flat land, and water and sewer. While other land uses do not generally require all of these characteristics, they are attracted by them, resulting in a competition by industrial, commercial, and residential development for limited industrially suited land. Therefore, regardless of what is projected, it is recommended that Franklin County designate as much industrially suited land as possible for industrial development in order to preserve it for use in the next 24 years and beyond. Otherwise, this land may be consumed by another land use, leaving Franklin County with too little undeveloped industrial land to meet its goals.

Public/Semi-Public Land Uses

Public and semi-public uses include government operations and transportation, communication, and utility facilities. The governmental sector is projected to double in size by the year 2025. This expansion will be necessary as a result of an expanding population as more people and more tax dollars create more work for the County, City and Town governments. The transportation, communication, utility industry, however, has been slowly declining. Many of these types of jobs are provided outside of Franklin County. However, it is possible that this trend could be reversed with increased development and demand for these services.

The ratio of public/semi-public jobs to land required also factors in additional semi-public uses that have few employees such as religious facilities and cemeteries. Both will require additional land in the future as the population grows. Future semi-public uses may further include community centers as different areas of the County develop more densely into identifiable communities

Other Land Uses

The "other" category includes farming, agricultural services (including fishing and forestry), mining, and construction. These jobs generally do not result in a substantial change in the undeveloped vs. developed character of the land. Farming, fishing, and forestry are not likely to demand more land than they already consume. Mining is generally done in natural areas, and those areas are permitted to revert to some natural form once the mineral, sand, gravel or rock is extracted. Finally, the construction industry may require an occasional office or storage yard, but most construction industry employees move from place to place building the structures that will be used by another industry. Because these uses result in very little alteration to the state of development of the land, they are not given a projection for future land demanded.

SUMMARY

In summary, Franklin County can anticipate as many as 13,269 additional residents by the year 2025. Given the prevailing development trends, those residents will require approximately 5,000 acres of existing agricultural or vacant land for homesites. As the population grows, so too will employment. Franklin County can anticipate approximately 6,000 new jobs by the year 2025 if current trends continue into the future, and the County is likely to increase its economic development efforts in order to obtain an even larger share of the regional employment. New commercial and

industrial facilities will require at least 623 acres of land, and that number will increase as Franklin County's economic development efforts are rewarded with new business.

While the projections given above are important for planning purposes, it is important to remember that forecasts reflect underlying assumptions, and the accuracy of forecasts relies heavily upon the reasonableness of those underlying assumptions. Using assumptions and pinpointing the exact period when growth will occur is very difficult due to unforeseen market fluctuations and changes in the economy. Therefore, it is very important to recognize that growth will inevitably occur, and managing the location rather than the time period in which it takes place is the best course of action.

PART II: THE COMPREHENSIVE PLAN

CHAPTER 5: FUTURE LAND USE PLAN

INTRODUCTION

This chapter and those that follow direct the County decision makers in setting land use, transportation, and community facility policies for the next 24 years. These chapters use the findings of the research, analysis, and public comments from the planning studies contained in Section I of this document to provide recommendations for the future development pattern and development support system of the County. For each major category there are three main sections: plan approach, goals, and policies. The Transportation and Community Facilities chapters also contain narrative on the existing conditions of the County's infrastructure. Chapters 1-4 shall serve as the existing conditions analysis for the future land use plan.

The Plan Approach provides the justification for the recommendations that follow it. The plan approach was written based on comments heard through the citizen input process, the results of the planning studies conducted as part of this process, and on recognized planning principles.

The Goals state the community consensus for the future. These goals are a compilation of comments included in the CIC report, the stakeholder group meetings held as part of this planning process, and interviews with Franklin County leaders and residents. Ultimately, it is these goals that the recommendations and the policies of the Comprehensive Plan were written to achieve.

Finally, the Policies are action steps for the County to take in order to implement the Plan. Without land use, transportation, and community facility policies which are established and enforced, this Plan will not be sufficient to manage growth throughout the County. Through the implementation of these policies, the community's vision can be achieved: to maintain control over change, to protect the community's image, and to provide a balanced environment for living, work, and play.

PLAN APPROACH

Land is a limited resource, and how the land is used and developed today in 2001 will affect the character and economics of the County for the generations that follow. Each generation has been given the responsibility to be good stewards of the County's resources.

Natural Resources

Franklin County has unique natural features that are not readily found elsewhere across the state. New development can be seen as a threat to that environment as well as to the County's delicate drainage system. However, development that is done properly can compliment and blend in with the natural environment and use a minimum amount of land.

Historic Resources

Franklin County is endowed with a rich collection of historic artifacts spanning nearly two centuries of immigrant migration and several thousand years of occupation by native peoples. The evidence of this human presence, whether manifest in constructed

improvements, archived records or sacred places constitutes a non renewable and significant resource, the destruction or loss of which should be avoided.

Financial Resources

New development makes significant impacts on limited tax payer funds. Unplanned and unanticipated development can cause strain on the County's roads, rural utilities and public services (schools, police, fire, and emergency medical services). This strain can lead to decreased levels of service and higher taxes.

LAND USE GOALS

1. Ensure that each new development considers/incorporates the conservation of the unique features of the site into the overall design of the site. These features may include but are not limited to the following: the soil and its capacity for drainage, the infrastructure available and potential impacts on that infrastructure, environmental constraints such as flood plains and erodible hillsides, and any other unique natural or man-made features of the site worth protecting (wetlands, historic structures, etc.). Thus, density, lot size, and development layout should be a function of what the land and the infrastructure can support.
2. Minimize the impacts of development on community supported services by requiring new development to "pay" for its impact – both for large developments and in areas of high growth where the cumulative impact of several small developments will cause a strain on the County's natural and financial resources. Efforts to minimize impacts should also consider how development could potentially negatively affect those uses already built in the area.
3. In addition to the functional impacts listed above, the design of a development should also take into consideration the aesthetic impact on the County. New developments should be sited in a way that is compatible with surrounding existing and planned developments, and their siting should include the following:
 - A relationship to prominent design features existing in the immediate area (i.e. trees, landforms, historic landmarks, etc.),
 - A relationship to existing structures,
 - The natural environment,
 - Pleasing transitions to surrounding development, and
 - A consistent design theme within larger developments or historic areas.

THE FUTURE LAND USE MAP

The future land use map is often seen as the essence of the Comprehensive Plan and is often mistaken for the Comprehensive Plan in its entirety. It is also often mistaken for a zoning map. However, the future land use plan map is only one component of the overall Comprehensive Plan, and it does not hold the legally binding power that a zoning map does.

The purpose of the future land use map is to set aside generalized locations that are most appropriate for various types of development. This is not to say that development

cannot occur elsewhere in the County or that only one land use type can locate in a particular area. What it does indicate is the *most appropriate* locations for development based on many factors such as transportation, utilities, soil conditions, the slope of the land, the presence of floodplains, and market preferences. In doing so, it also indicates areas that are not the most appropriate locations for development because of severe environmental conditions or because of conflicts with existing uses. In these areas, it is recommended that only limited development occur and that this land be reserved until conditions change that make them more desirable for development.

The future land use map was created by a series of meetings with the Steering Committee, the CIC, and the public. First, the CIC and Steering Committee examined environmental and other physical factors of the County as well as the County's goals and came up with five possible future land use scenarios. Those five scenarios were then combined into a draft future land use map. That map was displayed and described at five public meetings throughout the County and at the County Fair. The results of the public comments from the meetings resulted in the final land use plan contained in this chapter.

Why Are Land Uses Regulated?

Why land use regulation is necessary is a common question. Residents often fear an interference with property rights and do not see the justification in limiting development to only certain pieces of land. Therefore, this plan does not suggest removing the right to develop property anywhere in the County. It does, however, urge limiting development to areas designated for growth and keeping prime agricultural lands and wooded hillsides primarily as they are for the following reasons.

No matter where a development is located, it will have certain needs such as roads, school bus service, police and fire protection, garbage collection, power lines, and the like. The more spread out these uses are, the more costly the services provided to them become, and the cost of many of those services must be borne by all tax payers. Furthermore, these developments begin to interfere with existing farming operations as new residents complain of odors, noise, and other "disturbances" coming from nearby farms.

Industrial and commercial uses also benefit from land use regulation. By designating the most appropriate land for commercial and industrial development, the County can ensure that no other use of the land consumes these valuable sites. Furthermore, it is beneficial for new residents to understand which areas the County is seeking to develop for commercial and industrial uses as it may influence the homebuyer's decision of where to locate. Thus, having a plan for land use development provides a form of security in knowing how adjacent properties are going to develop in the future. Further explanation of the conflicts between land uses and the reasons for specific locations follow in the narratives related to the land use designations for Franklin County.

AGRICULTURE

Franklin County's recent growth has resulted in a loss of farmland to housing development. While the economics of the agriculture industry and the demand of the housing industry make this an unavoidable situation, concerns regarding these

conversions have surfaced. There are conflicts and differences of opinion regarding how land should be used between working farms, new residents, and struggling or retiring farmers.

There are inevitable conflicts between the preservation of farmland and the protection of private property rights. With the current state of the economy in Franklin County, farmers have the ability sell their land to developers or to subdivide and sell a portion of their land in order to remain profitable. On the other hand, scattered development can be costly to the community as it puts more of a strain on taxpayer supported services than concentrated development does. There is also a quality of life issue associated with allowing the rural character of the area to change to a suburban one.

Plan Approach

In most situations, working farms and suburban housing development are incompatible land uses. Working farms require the use of County roads by wide, slow moving machinery, the spraying of chemicals that are potentially dangerous to humans and deadly to the residents' gardens and rosebushes, and fertilization and animals that create odors that those moving from the city may view as nuisances.

It is impossible to manage the impacts of development without continuing to place some limits on the use of private property. The premise behind comprehensive planning and zoning is that some uses of private property must be regulated for the greater health, safety, and welfare of the community. Therefore, while it is undesirable to tell a property owner whether or not he can develop his property, the community can set standards for *how* that development is done.

Goals

1. Provide incentives for creative land development that incorporates open space, natural resources, and other aspects of rural character throughout the County.
2. In areas where working farms are in existence, require that new development be compatible with the daily operations of those farms and that both farmers and developers contribute to maintaining the conditions necessary for coexistence.
3. Maintain the balance between agricultural uses and residential and business growth in Franklin County, recognizing and promoting the importance of both agricultural and non-agricultural uses as well as alternative agricultural uses that take advantage of the nearby residential development (self pick berry farms, pumpkin patches, greenhouses, etc.).

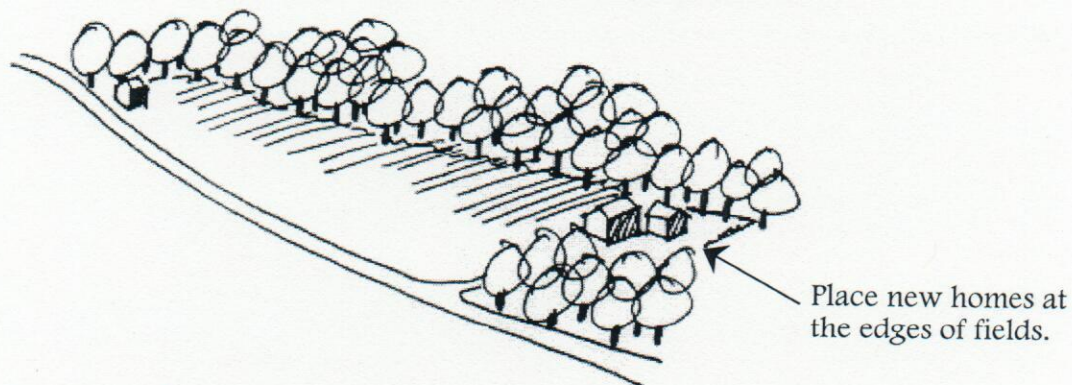
Agricultural Policies

Areas designated on the future land use map are set aside as the prime agricultural areas of the County. Any development that would occur in these areas would be subject to more stringent development standards that would retain both rural character and a healthy farming environment.

The areas chosen as agricultural areas were selected because they contain the best soils in the County for agriculture, and for the most part they have not yet been broken up by development. While some development will likely occur within these areas, it must be mindful of the fact that these are active farming areas that may contain nuisances to

residential development. New residents should be prepared to accept that pesticides and manure may be used, that farm machinery will often slow traffic on the roadways, and the extension of sewer lines and road widening efforts will likely be directed to other parts of the County where development is more prevalent.

1. Conserve the elements of the agricultural economy by ensuring that zoning in primarily agricultural areas allows not just farming but seed producers, farm equipment sales, green houses, self-pick facilities, and the like.
2. Knowing the need to generate revenue from sources other than solely farm income, create clear rules for the establishment of home based businesses. Similar to the rules for home occupations, these rules would allow these businesses to exist and to grow while setting limits on the size or intensity of the businesses so it does not in itself become a nuisance in the agricultural areas.
3. Discourage small lot subdivisions that completely cover a property with lots with little regard to site features. Such subdivisions are too dense next to agricultural uses and create too many potential conflict points between adjoining agricultural and residential uses.
4. Site houses at the edge of fields. Provide a large enough buffer yard to protect the home and landscaping from chemical use on neighboring farms.¹



5. Encourage the use of cluster subdivision design for residential developments that occur within agricultural areas. Homes should be developed on non-tillable land, preserving the best agricultural areas for crop production and/or livestock. Refer to the Residential Uses section in this chapter for more information regarding cluster subdivision design standards.
6. Require an agricultural disclaimer to be attached to all deeds of newly created lots within agricultural areas. This disclaimer should contain right-to-farm language that protects existing farmers from nuisance claims brought by new residents when the farmer is operating the farm in a reasonable and customary manner.
7. Seek an agricultural entrepreneur that can work with farmers to produce alternative crops that produce higher profits. The role of the agricultural

¹ Sketch adapted for Franklin County from: MAC/USM Design Arts Project (1991), *The Hidden Design in Land Use Ordinances*.

entrepreneur is to aid farmers in making the connection between growing the crops and delivering them to new markets.

RESIDENTIAL USES

Housing development in Franklin County has increased rapidly in recent years. Homes are generally located on lots which front existing county roads. Furthermore, housing development is occurring scattered throughout the County wherever land is available for sale. Little thought is given to the ability of the road network or the soil composition to handle the development or the effect run-off may have on erosion and water quality.

Plan Approach

Scattered development is costly to the County and ultimately to the County's tax payers. By concentrating development, impacts to roads and utilities can be anticipated and planned for, and developments can be built on package sewer plants and private roads. Furthermore, scattered development leads to longer response times for emergency services and both increased costs and riding times for student busing to schools. While concentrating development in areas best suited to accommodate the growth does result in higher densities, higher density developments can still retain a very rural character when they are designed around the use of open space and natural features.

There are generally two types of residential growth in rural communities: suburban and rural. Suburban growth occurs near the County's cities and towns. While residents of these areas enjoy the character of a rural area or a small town location, they generally still enjoy access to more urban amenities such as parks, commercial areas, municipal utilities, and easy access to highways. These areas also accommodate people who cannot afford or who do not desire the larger lots that rural housing offers.

Rural residential development, on the other hand, prefers to be far removed from other development. However, as many residents of these rural areas have at one time lived in suburban communities, they often expect urban services such as water and sewer and good roads. They also dislike many aspects of farming such as pesticide sprays, fertilization with manure, animal odors, and slow moving farm equipment on the roadways. Thus, permitting rural residential development requires compromises between homeowners and farmers.

Residential Goals

1. Determine appropriate locations for residential development based on soil suitability, environmental constraints, and road capacity.
2. Develop environmentally sensitive guidelines and provisions for the preservation of natural features for development in areas that are not well suited for large scale development.
3. Make use of development regulations and incentives to develop housing that is built off of County roads and that preserves the rural character of road corridors.
4. Ensure the housing needs of all County residents are met. Changing demographics such as an increasingly older population lead to different housing needs, and an increase in commercial and industrial uses may result in a need for more starter homes for younger residents.

Smaller Lot Housing

An analysis of demographics for Franklin County shows that the county is not retaining its youth. Singles and young families are small in number, and one likely hindrance is a lack of affordable housing. There are also many elderly people living alone in Franklin County. They too need more affordable housing and housing on smaller lots, close to amenities. In the past, much of the County's affordable housing needs have been met by mobile homes, but by allowing smaller lots near "urban" areas, single family housing developments and/or multi-family structures can provide more affordable housing options for the young and for the elderly.

Areas designated for smaller lot housing should only develop once utilities are available. Therefore, the areas designated on the future land use map for small lot housing are located where utility expansions are practical and likely within the next 24 years. They are also located near the County's cities and towns where the smaller lot sizes are similar in character to the historic development patterns.

Suburban Housing

Suburban housing areas are currently developing in a standard, low density, suburban style. While this type of development is expected to continue, the County should ensure that these areas provide amenities to their residents. These amenities may include: sidewalks, perimeter landscaping, street trees and play areas within developments.

Suburban development areas are designated northwest of Brookville and around Batesville. As these communities grow, residents will begin to expect the more urban amenities mentioned above. Planning for these amenities concurrently with the growth will avoid the need for the County to go in and add them later at its own expense.

Rural Development

the part of the County designated for rural development is currently developing in a similar manner to those areas designated by this plan as "suburban housing". However, this area is less likely to be provided with sewer, the roads are more rural in character, and the soils are poorly drained. While this area will continue to be a prime growth area, the County should turn to alternative development options such as cluster housing and alternative sewage treatment to ensure that this area retains its character, that no undue strain is placed on the roadways, and that the environment is protected against untreated sewage.

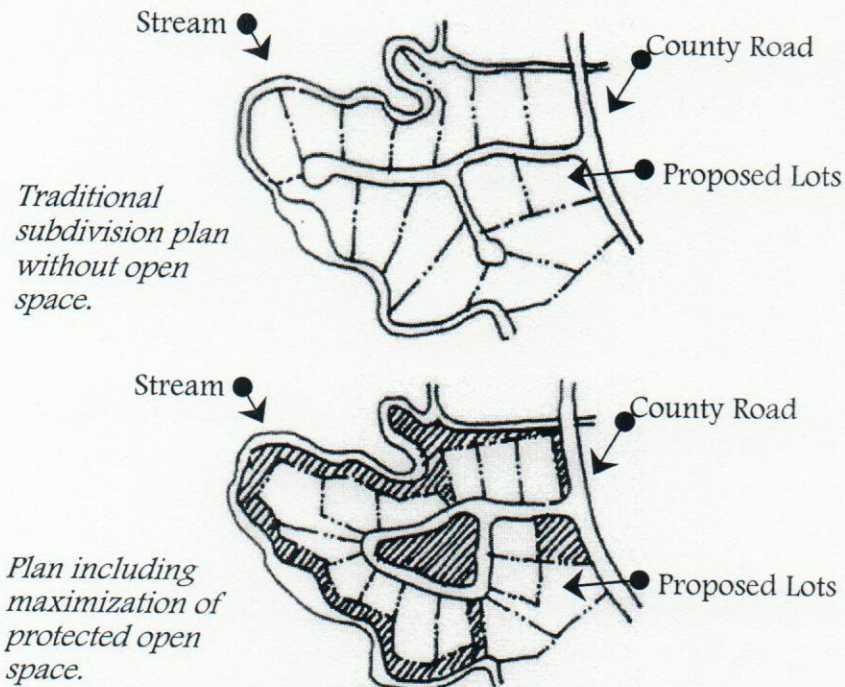
This rural development area covers much of Whitewater Township, one of the most rapidly developing areas in the County. Because of the lack of sewer and the condition of the roads, allowing development to continue with little regulation of sewage disposal or curb cuts could mean costly clean up and/or repair for the County in the future. The scenic beauty of the area and its proximity to Cincinnati make it a wonderful place to build a home. However, the County should take a proactive role in ensuring development is done properly in this area. Doing so will save the County and its taxpayers money in the future.

Residential Policies

FIGURE 5.1: RESIDENTIAL POLICIES MATRIX

Smaller Lot Housing	Suburban Housing	Rural Development	Policy
X			Promote higher density single family detached, single family attached, and multi family residential options.
X			Locate senior housing and higher density residential housing near commercial centers.
X			Encourage the development of two-family houses within infill development areas of the County's towns.
X			Permit the use of granny flats-small residential dwellings typically located over the garage and usually occupied by a family member.
		X	Provide lower density developments with indirect access to arterial streets by way of private streets and shared drives.
X			Encourage the retention and rehabilitation of historic housing and neighborhoods.
X			Provide a zoning classification consistent in size and character with adjacent historic towns and cities.
	X	X	Create a zoning classification that provides for cluster subdivisions that incorporate significant amounts of open space. Clusters should remain small with 25 to 75 lots.
		X	Retain fields and forest, restrict lawn area.
		X	Require large setbacks from the property lines
X	X		Require moderate setbacks from the property lines.
X	X		Require sidewalks to connect to existing developments, commercial areas, and adjacent subdivisions.
X	X		Create livable built environments that provide: destinations to which people can walk, high quality planned walking areas, on-site amenities, up-front investment in infrastructure, a balance of curving and straight streets and cul-de-sacs, and affordably priced homes.
X	X	X	Incorporate trees and landscaping into the design of new development.
X	X		Encourage residential development to include one or more of the following recreational amenities: club houses, swimming pools, golf courses, tennis courts, children's play areas, community garden plots, jogging or exercise trails, picnic shelters, barbecues.
X	X	X	Encourage residential developments to include entrance and perimeter landscaping, graphic identity used on entrance signs, roadway landscaping, special street lights, decorative fencing at property perimeters and major intersections.
X	X		Design subdivisions into neighborhoods with well-defined centers and edges. Centers should contain a common area such as a park, plaza, playground, or recreation center.
X	X	X	Require that new residential growth abutting existing commercial and industrial uses provide a landscape buffer to minimize the level of incompatibility between the uses.

FIGURE 5.2: CLUSTER SUBDIVISIONS



ECONOMIC DEVELOPMENT

New development in Franklin County has been primarily residential. Many of these new residents live in Franklin County and commute to Batesville or Cincinnati for work. The implications of this type of growth are reflected in a rising tax rate and a shortage of County funds. According to a national study, for every \$1.00 of tax revenue collected from a residential subdivision, \$1.22 is spent for services to be provided to that subdivision. On the other hand, for every \$1.00 of tax revenue collected from a commercial development, only \$0.32 is demanded in public services.² Thus, to keep tax rates down and to ensure the county has enough revenue to fund the demanded services, there is a need for commercial and industrial development to offset the costs of residential growth.

The added advantage of additional commercial and industrial development is the job growth for the County. Additional jobs may help the County retain some of its younger population which are currently leaving the County to find jobs in the larger cities; and more jobs locally may retain some of the population which currently must commute out of the County for work. This commuting workforce is likely to spend a substantial part of their income in the communities in which they work as they stop to shop and run errands on their way home from work. See pages 25-26 for more information on Franklin County's commuting patterns.

² Joel Garreau (1991), *Edge City: Life on the New Frontier*. Additional studies have shown that the cost of services for industrial and commercial can range anywhere from \$0.30 to \$0.70 for every tax dollar collected. While there are differing opinions as to the actual costs of services provided to commercial and industrial properties, the costs are generally lower if these developments are properly planned for.

Furthermore, tourism plays a definitive role in the economy of Franklin County. Brookville Lake, the Town of Metamora, the canoe liveries, and Haspin Acres all draw visitors into the County. While with these visitors comes the potential for economic gain, thus far the people of Franklin County have experienced some of the negative aspects of being a tourist destination: traffic congestion and a strain on the County's emergency services. The County has seen very little tax revenue because many visitors come only for the day and may not spend any substantial amount of money. While there has been expansion of some service businesses such as gasoline stations and "quick marts", most of the County's citizens have felt no direct positive impact. State regulations concerning the land surrounding Brookville Reservoir add to the difficulty in enhancing economic development through tourism.

Plan Approach - Regional

Cities and counties are in intense competition for commercial and industrial development, and companies seeking to relocate will take advantage of that competition. In order for Franklin County to be a contender, it must provide the facilities and amenities that businesses expect. These include: lots sized and zoned for the appropriate use, utilities (sewer, water and natural gas) at the site, and good access to regional roadways and rail lines. Provision of these factors also benefits the County as it is necessary that large scale commercial and industrial development occur in appropriate locations away from residential and environmentally sensitive areas, on utilities, and on appropriately constructed roadways designed for heavy loads and that do not send trucks through the County's small towns or residential developments. Commercial and industrial operations also expect financial incentives which many communities are willing to offer in order to give themselves an edge over the competition.

Plan Approach - Tourism

While there are certainly negative aspects associated with a tourist economy, Franklin County should strive to take advantage of the opportunities available. The County offers an array of outdoor activities including canoeing, hiking, fishing, and hunting, and the potential exists to market these activities as much more than a day trip.

Besides marketing the County's natural resources for economic advantage, the County can use the character of its small towns to entice small business development. Recent trends across the Country show convenience and personal retail uses moving out of downtown areas. Empty storefronts, upper stories, and even converted houses make ideal locations for tourist oriented retail and office spaces for businesses that either cater to local residents or who rely on computer and technology for their livelihood rather than physical goods and services.

Economic Development Goals

1. Identify appropriate areas for suitable and appropriate commercial and industrial development throughout the county. Decisions should take into consideration surrounding land uses and the development's impact on those land uses, sensitive environmental features, the capability of the land (i.e. soils), existing utilities or the cost of extending utilities to the site, and accessibility to the site and to major regional transportation routes (highway and rail) from the site.

2. Identify potential policies and investments that will assist the County in attracting increased commercial and industrial development of the type and character the County desires.
3. Minimize the impacts of commercial and industrial development on the surrounding environment through pollution control measures and building requirements that ensure that industrial and commercial development does not impair the character of the area and is a "good neighbor" to surrounding land uses.
4. Increase overnight lodging options and advertise the County as a vacation spot to allow the County to retain some of its tourists' spending money and both support local businesses and generate spin-off businesses.
5. Encourage small business development in the Towns of Franklin County through the adaptive re-use of existing structures.
6. Limit the negative impacts of tourism through traffic management and fees for emergency service runs (fire, police, EMS) in areas heavily populated with non-residents (the lake, campgrounds, etc.).

Local Serving Commercial Uses

Most commercial uses in Franklin County will serve local residents. While these areas may provide some tourist amenities as well, the most likely development types will be grocery stores, vehicle sales, furniture sales, etc. Commercial uses should be located along major roads in close proximity to a large population of consumers. To the extent possible, these uses should be developed where water and sewer are available.

Two large commercial locations are specified on the land use map. These areas are within close proximity to a large population base, major roadways, and utilities. The commercial area near Batesville is located just east of the City limits on SR 229 and Pocket Road. Traffic volumes ensure high visibility, and it is convenient and accessible for the growing Batesville area.

The second commercial location is north of Brookville on SR 101. Several local businesses have already located here, and the potential for tourism related business is high due to the close proximity of the lake. Permitted uses in this area should vary from those uses likely to locate in downtown Brookville in order to minimize competition between the two business districts.

Commercial Nodes

In addition to large commercial developments which provide services to large portions of the County, areas with high residential concentrations are likely to develop small commercial areas of their own to meet the needs of the neighborhoods nearby. These types of commercial nodes generally contain convenience retail and services such as day care, banks, dry cleaners, video rentals, pizza delivery, and the like. These types of developments should be located at major intersections and near population centers. The uses within these developments should be on a neighborhood scale and should be properly landscaped, screened, lighted, and advertised so as not to produce a nuisance to adjoining residential neighborhoods. Locations of nodes on the draft future land use map include areas around: Andersonville, Metamora, Reservoir Hill, Mt. Carmel, Southgate, Blooming Grove, US 52 (near Holland Rd.), Hamburg, Enochsburg, and New

Trenton, Brookville, Batesville, Oldenburg, Laurel, and Cedar Grove are all expected to meet these types of neighborhood commercial needs for the residents in and around those municipalities.

Planned Enclosed Industrial Uses

Enclosed industrial uses are industrial uses within enclosed buildings. These uses generate minimal noise, smoke, odors, vibration, or other potential nuisances. Enclosed industrial uses may include: light manufacturing, fabrication, cleaning, testing, repair, enclosed storage, printing, etc. Enclosed industrial uses which are located along highly visible corridors such as SR 1 and SR 46 should provide deep setbacks, landscaping, and buffering as well as attractive signage and building facades. Development should be guided to these areas by the provision of water and sewer, and roadways through industrial areas should be built to County standards, regardless of whether they are privately owned.

Planned Open Industrial Uses

Open industrial uses are industrial uses with outside activities and storage. These uses may generate noise, smoke, dust, odors, vibration, light, and other potential nuisances. Open industrial uses may include: manufacturing facilities, truck freight terminals, etc. North of SR 101 is an ideal location for open industrial due to the relatively undeveloped nature of the area coupled with the close proximity to the interstate. An open industrial area is also indicated along US 52, southeast of Brookville, due to the nature of the existing uses in this area. Development should be guided to these areas by the provision of water and sewer, and roadways through industrial areas should be built to County standards, regardless of whether they are privately owned. Industrial performance standards should be used to guide the type of development in these areas in order to minimize noise, light, air, and water pollution. Setbacks and buffering should also be required where industrial uses are in close proximity to residential dwellings (including farm houses).

Economic Development Policies

Policies for Attracting New Economic Development

1. Preserve adequate land area for future commercial and industrial uses through zoning map changes.
2. Undertake a targeted industry study to determine which businesses and industries should be recruited to Franklin County.
3. Determine the appropriate fiscal tools to use in addressing the retention, expansion, and attraction of business. The fiscal tools that are selected need to meet the demands of the market while also being fiscally responsible to the County taxpayers.
4. Create a marketing blueprint to sell all aspects of the County. The marketing blueprint should include the targeted industry study, a tourism plan, and a marketing system that distributes an image of Franklin County to desired clients.
5. While communities often focus on the attraction of new business, the County should also work with existing businesses to encourage their retention and

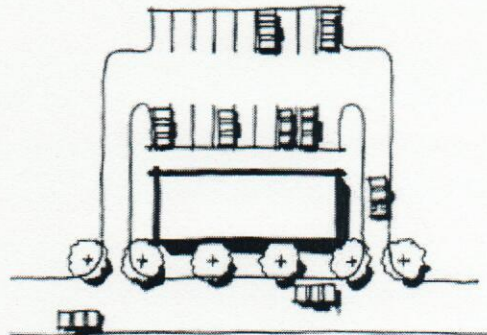
expansion. By helping to meet the needs of existing businesses, the County has a better chance of capturing their growth rather than having the business expand outside the County.

6. Create a business incubator site within the County. At this site, the zoning should be proper to accept industrial uses without a lengthy rezone process. In addition, sufficient utilities need to be brought to the site. The County economic development agency should also consider constructing a shell building on the site to shorten the time until occupancy.
7. Conserve the natural amenities and rural atmosphere of the area to protect and promote tourism within the County.
8. Create vacation packages that encourage overnight stays. The packages can build upon the outdoor recreation, site seeing, and shopping opportunities within the County with overnight stays in bed and breakfasts or hotels.

Policies Which Create Standards for New Development

1. Revise the review process the County undertakes for the approval of new commercial and planned industrial site development plans. Sites should be required to under go development plan review by the Plan Commission. Review should include examination and approval of the site's access, landscaping, lighting, and signage, in addition to general zoning requirements for setbacks, height, etc., in order to ensure that development is compatible with the surrounding land uses and environment.
2. Require new commercial and industrial developments to have public water and sewer or an acceptable equivalent.
3. Establish a corridor overlay district for state highways and gateways that contains special standards that ensure quality commercial and industrial designs that will enhance the County's roadways. Standards should address signage, setbacks, landscaping, height, and density to ensure that the character is consistent with the vision of the community.

4. For small scale auto-oriented uses such as fast food restaurants and convenience stores, locate the buildings close to the street, place parking behind the buildings, use wall mounting or ground installation of signs (i.e. monument signs), and follow architectural styles that are compatible with the area.



5. For large scale auto-oriented uses such as grocery stores and home improvement centers, use smaller signs, provide more landscaping, use more interesting architecture, use more varied building materials, and locate the stores within shopping centers rather than on stand alone sites.
6. Create lighting standards that address the amount of acceptable light in planned business and industrial parks and industrial areas. Lighting should be cut-off and

shielded, meaning that no light is directed out or up. These measures minimize light pollution and allow for continued night sky viewing.

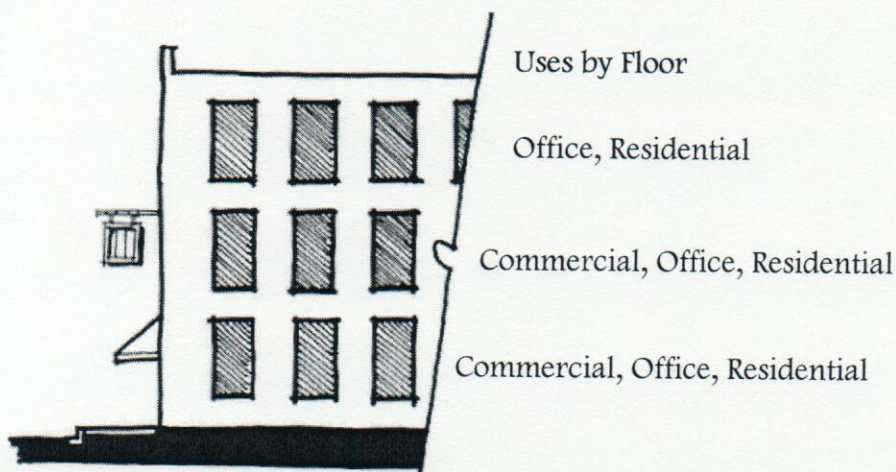
7. Locate industrial uses so that they have direct access to collector or arterial streets unless they are located in a business or industrial park.
8. Update performance standards to provide acceptable levels of noise, smoke, particulate matter, odors, poisonous and injurious fumes and gases, glare and heat, fire hazards, and discharge. These provisions should be used to minimize impacts on the environment and surrounding land uses.
9. Require a physical buffer between commercial and industrial uses and residential uses.

Policies for Commercial Nodes

1. Concentrate commercial development in compact centers or districts rather than letting it sprawl out in strips.
2. Locate small scale neighborhood commercial development at intersections where future road improvements and signalization can be targeted.
3. Within commercial nodes, require that new development have interconnecting parking lots, only one access per use per street, and where possible, combine access at signalized intersections.

Policies for Historic Downtown Development

1. Emphasize preservation or adaptive reuse as the preferred management of historic structures. Where preservation or adaptive reuse is not possible, require that new development reflect the character and historic references of the original feature.
2. Convert empty storefronts and upper stories into commercial, office, and retail space through adaptive reuse.
3. Allow a mixture of commercial, office, and residential uses within the same building.



4. Examine the conversion of significant residential houses to professional office uses as a method to protect the traditional character of these areas, and specify the conditions under which this would be acceptable.

RURAL CHARACTER

Franklin County has a truly unique mix of scenic natural features, quaint small towns, and agricultural landscapes. However, as new development occurs, the pressure will exist to change those features that make Franklin County unique, and instead make it look like any other suburban bedroom community. Franklin County should strive to protect those features which distinguish it, including the wooded hillsides, historic buildings, small towns, and the rural atmosphere.

Throughout the Comprehensive Planning Process, much discussion was given to the preservation of rural character. However, in order to preserve the rural character, there must be a generally accepted definition of what "rural character" means. The following definition is provided by the State of Washington and was widely held by the participants in the planning process to be an accurate depiction of what the County is trying to preserve.

Rural character is a pattern of land use and development:

- Where open space and the natural landscape are dominant over built areas;
- That fosters a rural lifestyle and a rural-based economy;
- That provides a visual landscape that is usually found in rural areas and communities;
- That protects surface and ground water;
- That fosters wildlife habitat;
- That reduces the inappropriate conversion of undeveloped land; and
- That generally does not require the extension of urban governmental services.

Plan Approach:

Increased development is a reality for Franklin County, and while some degree of change is inevitable, the County has the ability to dictate how that new development blends in with the existing character of the County. The County needs to be able to tell developers what is expected of them in order to build in Franklin County rather than allowing new development to dictate the future character of the County.

Rural Character Goals

1. In areas where the character is historic, such as in the County's small towns, encourage adaptive re-use of buildings, and require that new construction be done in the same style as the historic character of the street and Town.
2. Preserve access to historic town cores through sidewalks and street connections between new developments at the town's edge and the older development within the town.

3. Set standards to ensure that new development blends well with its environment. Standards may include setbacks, building scale and material, landscaping, lighting, and more, depending on the use and location of development. Requirements for open space and preservation of environmental features should also be incorporated into the development's layout and design.

Mixed Agriculture/Woodland Areas

The areas of the map with no land use color designation consist of a wide variety of land types, from agricultural lands, to steeply sloped hillsides, to some of the most beautiful forested areas in the State of Indiana. Soils on these hillsides are not well suited for agricultural production, and while they are appropriate for septic tanks, they are often located in steeply sloped areas subject to erosion when disturbed or cleared of their natural vegetation. Therefore, these areas offer some of the most appropriate opportunities to protect Franklin County's woodlands. However, with the addition of sewer service in and around Metamora, growth opportunities will increase in these environmentally sensitive areas. As residential development occurs, it should be done in a manner that does not increase the erosion of the hillsides, and it should be located away from the County's floodplains. Wherever possible, new development should retain natural vegetation as part of the site design.

Rural Character Policies

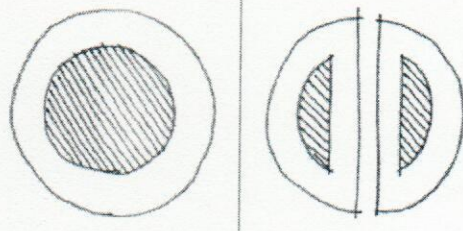
1. Preserve important natural features such as floodplains, wetlands, steep slopes, wooded areas, etc. as open space.
2. Encourage the use of open spaces necessitated by environmental constraints (floodplains, slopes, wetlands, etc.) for use as passive and active recreational opportunities such as playgrounds, walking trails, and fishing.
3. Avoid construction in flood hazard areas.
4. Require open space and landscaped buffering between incompatible uses to create a physical and visual barrier. The greater the level of incompatibility, the greater the buffer. Provisions should include which uses should be screened, the height and depth of the screen required, and a list of permitted plant or building materials.
5. Encourage the use of cluster subdivision design for residential developments that occur within agricultural areas. Refer to the Residential Uses section in this chapter for more information regarding cluster subdivision design standards.
6. Avoid creating small parcels along arterial and collector thoroughfares, in order to discourage excess curb cuts and strip development.
7. Expand on the development patterns of the County's towns by having adjacent new development follow similar road layouts, lot sizes, and architectural styles.
8. Promote environmentally sensitive development practices. Refer to the diagrams below for policies relating to promoting environmentally sensitive development practices.

9. Ensure that new development is compatible with existing development and depicts the character of surrounding uses. Refer to the site sensitive diagrams below for policies relating to conserving distinctive features that contribute to the character of the County.

Environmentally Sensitive Development Practices

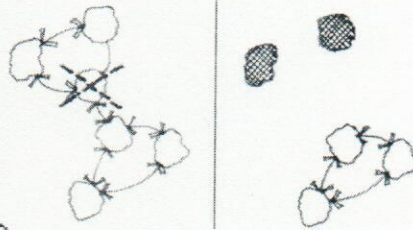
1. Keep large areas of interior habitat intact.

Dividing a large patch of land into two smaller ones removes interior habitat. This can lead to reduced population sizes and number of interior species.³

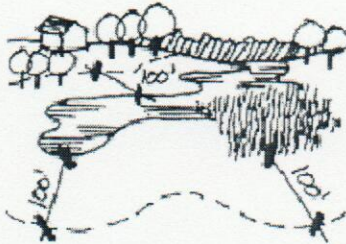


2. Maintain habitat connections.

Removing a patch can reduce the size of a population. This increases the likelihood of within-patch extinction, slows down the recolonization process and reduces the stability of the population.³

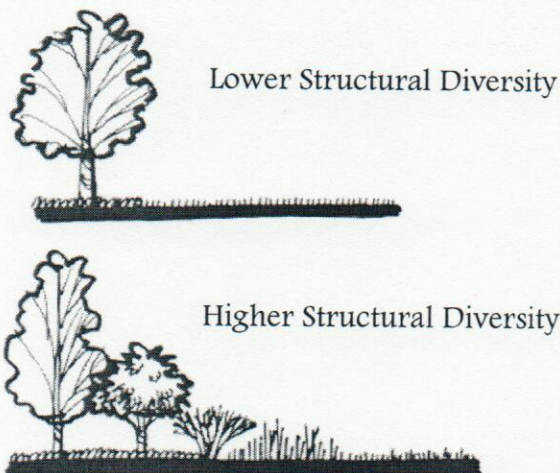


3. Maintain a buffer around wetlands and bodies of water.



4. Maintain high edge structural diversity.

Vegetative edges with a high structural diversity are richer in animal species.



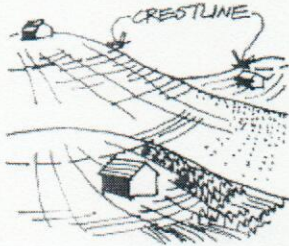
³ Sketches adapted for Franklin County from: Wenche E. Dramstad, James D. Olson, and Richard T.T. Forman (1996), *Landscape Ecology Principles in Landscape Architecture and Land-Use Planning*.

⁴ Sketches adapted for Franklin County from: Wenche E. Dramstad, James D. Olson, and Richard T.T. Forman (1996), *Landscape Ecology Principles in Landscape Architecture and Land-Use Planning*.

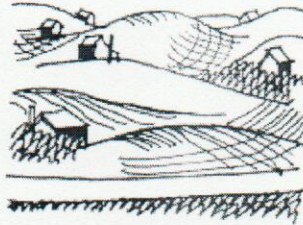
Site Sensitive Development Practices

1. Minimize visual and environmental impact.⁵

Building below the crestline reduces the visual impact of the structures.



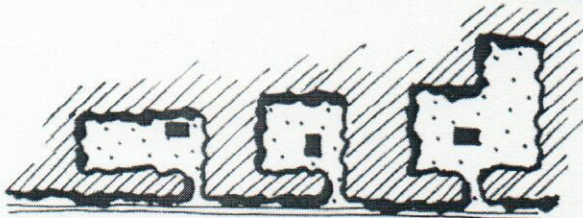
Insensitive Siting –
View directly blocked



Sensitive Siting –
House to side of view

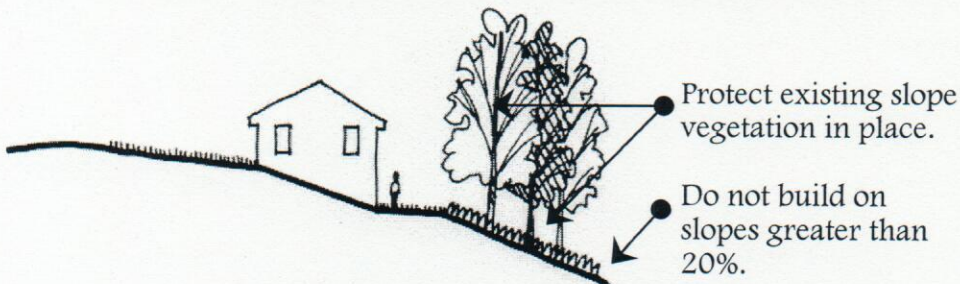
2. Allow the natural landscape to predominate.⁶

Do not gouge out pockets of cleared land.



Retain a buffer of trees
between the road and
homes.

3. Preserve important natural features such as wetlands, steep slopes, woods, etc.



⁵ Sketches adapted for Franklin County from: MAC/USM Design Arts Project (1991), *The Hidden Design in Land Use Ordinances*.

⁶ Sketches adapted for Franklin County from: MAC/USM Design Arts Project (1991), *The Hidden Design in Land Use Ordinances*.

CHAPTER 6: TRANSPORTATION PLAN

INTRODUCTION

The roads of Franklin County were designed to follow the County's hilly terrain and winding streams. These roads were originally constructed to carry rural traffic but are now being inundated by substantial increases in the amount of cars and trucks. Many of these roads are wide enough for only one vehicle with little room for passing; and because the roads follow the topography of the land, travel times can be long, and direct routes are rare.

As Franklin County continues to develop, the roadways will need to adapt to handle the more urban character of various parts of the County. However, as road improvements are considered, decision makers should keep in mind that the character of the roadways is an integral part of the character of the County. The winding roads following scenic streams, the trees canopying the pavement, and the curves which hide the development around the corner help define what Franklin County is and why it is such a pleasant place to live and to visit. Prior to committing resources to roadway improvements, a balance should be agreed upon so that roadways remain safe but do not lose their rural character. The purpose of the roads of Franklin County should not be simply to move as many people as possible as quickly as possible. Travel on Franklin County's roads should be an experience that is unique to Franklin County.

EXISTING CONDITIONS

Periodically, the Indiana Department of Transportation measures traffic volumes on its state highways. The most recent of these traffic counts were done for Franklin County in 1997, and were recorded as average daily traffic volumes (ADT). These traffic counts give an indication as to how heavily traveled the County's rural highways are and where traffic problems may be occurring. Furthermore, traffic counts can be projected into the future to account for population growth and business growth which adds to the traffic on County roads. Thus, these traffic counts can provide an early indication of where problems may arise in the future.

Level of Service¹

One of the most common indicators of how well a roadway is functioning is through a measure of its level of service. Level of Service is determined by comparing the volume of traffic on a roadway with a predetermined volume that traffic engineers have specified a roadway should be expected to handle. The amount of traffic a road can adequately serve is based primarily on the number of lanes and the terrain of the road. Much of Franklin County's terrain is classified as rolling. Therefore, in the following level of service analysis the traffic volume limits for rolling terrain were used. It is important to note that straight, level roads can bear as many as 8,100 additional trips per day than roads on rolling terrain before they reach capacity. Therefore, level stretches of roadways may actually have a higher level of service than is indicated on Figure 6.1 because the rolling terrain figure was used in determining the level of service throughout the County.

¹ Institute of Traffic Engineers (1992), *Highway Capacity Manual*.

Roadways functioning at a level of service A allow motorists to travel at average speeds approaching 60 mph, and passing, when required, is rarely delayed by on-coming traffic. As roadways approach a level of service B, passing may be more necessary in order to maintain desired speeds. However, motorists are generally able to maintain speeds around 55 mph where permitted by the terrain. At a level of service C, traffic flow is still steady (speeds can be maintained around 52 mph). However, slow moving vehicles and turning cars can cause congestion, as on-coming traffic volumes may make passing difficult. Roadways with a level of service D exhibit unstable traffic flow. Speeds of 50 mph can still be maintained in ideal conditions, but slower vehicles and turning movements can cause large back-ups as passing on these roadways is extremely difficult. Even distractions on the side of the road can cause traffic to reduce speeds, and there are often packs of cars as many as 10 long before there is a break in the traffic flow. Once a roadway reaches a level of service E, speeds drop below 50 mph, even in straight, level terrain, and speeds may drop as low as 25 mph on hills and in curves. Passing is virtually impossible on a level of service E roadway, and slower vehicles and turning movements can cause large back ups. Level of service F is reached when the roadway exceeds its capacity, resulting in heavily congested flow and low speeds.

Figure 6.1 indicates the current and projected ADT volumes and levels of service for Franklin County's state highways. Segments of these highways which travel through towns such as US 52 through Brookville or State Highway 229 through Oldenburg have been left off the table because they are not classified as rural highways. The level of service on these stretches of roadway are a factor of how well their intersections with other roads function. This type of analysis requires much more detailed site studies than are within the scope of a Comprehensive Plan. Following Figure 6.1, Map 1 is a graphic depiction of the current traffic volumes on Franklin County's highways.

PLAN APPROACH

One of the greatest impacts recent growth has had on Franklin County roads is the impact on roadway safety. Roads which are traveled regularly should be wide enough or at least have shoulders to allow two vehicles to pass or a car to pass slow moving farm vehicles; children should be safe standing on the side of the road waiting for the school bus; and walkers, joggers and cyclists should be safe along the side of the road. Recent growth has generated a great deal more traffic than the County's rural roads were designed to handle. While the intent of the Plan is not to create wide, straight thoroughfares, heavily traveled roads should be able to accommodate two-way traffic.

TRANSPORTATION GOALS

1. Through the Comprehensive Plan's designation of areas experiencing growth and poised to experience growth, begin a program of right-of-way dedication, roadway widening and/or adding shoulders to roads which are expected to become more heavily used.
2. Avoid strip development along county roads. Numerous driveways increase turning movements and backing onto county roads which thus decrease safety. Instead, require that, when possible, development occur on private subdivision roads built to County standards in order to allow for emergency vehicle turn-arounds as well as

FIGURE 6.1: ADT & LOS FOR TWO LANE RURAL HIGHWAYS

Street Name	Segment		1997 ADT	LOS	2025 ADT	2025 LOS
	From	To				
State Hwy 1	County Line (South)	St. Peters Rd.	2,430	B	7,000	D
State Hwy 1	St. Peters Rd.	US Hwy 52 (Jct. East)	2,140	B	6,700	D
State Hwy 1/US Hwy 52	US Hwy 52 (Jct. East)	Little Cedar Rd.	6,400	D	13,400	E
State Hwy 1/US Hwy 52	Little Cedar Rd.	Highland Center Rd.	7,130	D	14,200	E
State Hwy 1/US Hwy 52	Highland Center Rd.	3rd St. (Brookville)	15,710	F	22,700	F
State Hwy 1/US Hwy 52	3rd St. (Brookville)	4th St. (Brookville)	16,410	NA	23,500	NA
State Hwy 1/US Hwy 52	4th St. (Brookville)	5th St. (Brookville)	15,550	NA	22,600	NA
State Hwy 1/US Hwy 52	5th St. (Brookville)	St. Mary's Rd. (Brookville)	16,400	NA	23,400	NA
State Hwy 1/US Hwy 52	St. Mary's Rd. (Brookville)	10th St. (Brookville)	16,400	NA	23,000	NA
State Hwy 1/US Hwy 52	10th St. (Brookville)	US Hwy 52 (Jct. West)	17,790	NA	24,500	NA
State Hwy 1	US Hwy 52	State Hwy 101	11,800	E	20,000	F
State Hwy 1	State Hwy 101	Reservoir Rd.	6,880	D	9,600	E
State Hwy 1	Reservoir Rd.	Bentley Rd.	6,880	D	10,000	E
State Hwy 1	Bentley Rd.	County Line (North)	4,760	C	5,300	D
State Hwy 101	State Hwy 1	Oxford Pike	7,310	D	11,700	E
State Hwy 101	Oxford Pike	Golden Rd.	4,170	C	8,600	E
State Hwy 101	Golden Rd.	Pea Ridge	3,330	C	6,000	D
State Hwy 101	Pea Ridge	Fox Run	3,040	C	5,000	C
State Hwy 101	Fox Run	County Line (North)	2,520	B	7,600	C
State Hwy 121	US Hwy 52	Old US Hwy 52	1,660	B	2,900	C
State Hwy 121	Old US Hwy 52	Edgerton Rd. (Laurel)	3,250	C	4,500	C
State Hwy 121	Edgerton St. (Laurel)	South St. (Laurel)	3,510	NA	4,700	NA
State Hwy 121	South St. (Laurel)	Pearl St. (Laurel)	3,510	NA	4,600	NA
State Hwy 121	Pearl St. (Laurel)	Neff St. (Laurel)	2,560	NA	3,000	NA
State Hwy 121	Neff St. (Laurel)	County Line (North)	1,630	B	1,600	B
State Hwy 229	County Line (South)	Tree Rd. (Batesville)	24,410	F	34,200	F
State Hwy 229	Tree Rd. (Batesville)	Water St. (Oldenburg)	6,450	D	6,400	D
State Hwy 229	Water St. (Oldenburg)	Main St. (Oldenburg)	4,920	NA	10,700	NA
State Hwy 229 (Main St)	Sycamore St. (Oldenburg)	Pearl St. (Oldenburg)	5,590	NA	10,800	NA
State Hwy 229	Pearl St. (Oldenburg)	Creek Rd.	1,900	B	1,900	B
State Hwy 229	Creek Rd.	Haytown Rd.	1,300	B	2,500	B
State Hwy 229	Haytown Rd.	US Hwy 52	1,770	B	3,000	C
State Hwy 244	County Line (West)		730	A	800	A
State Hwy 252	Main St. (Brookville)	Mill St. (Brookville)	2,680	B	3,200	C
State Hwy 252	Mill St. (Brookville)	Little Cedar Rd.	1,350	B	1,900	B
State Hwy 252	Little Cedar Rd.	Big Cedar Rd.	1,660	B	2,200	B
State Hwy 252	Big Cedar Rd.	Springfield Rd. (Mt. Carmel)	1,980	B	2,500	B
State Hwy 252	Springfield Rd. (Mt. Carmel)	County Line (East)	1,370	B	1,500	B
State Hwy 46	County Line (South)	Huntersville Rd. (Batesville)	6,600	D	7,500	D
State Hwy 46	Huntersville Rd. (Batesville)	Pocket Rd.	4,760	C	5,700	D
State Hwy 46	Pocket Rd.	County Line (West)	3,650	C	3,600	C
US Hwy 52	County Line (South)	St. Peters Rd.	4,940	C	4,900	C
US Hwy 52	St. Peters Rd.	State Hwy 1 (Jct. South)	4,710	C	10,400	E
US Hwy 52/State Hwy 1	State Hwy 1 (Jct. South)	Little Cedar Rd.	6,400	D	13,400	E
US Hwy 52/State Hwy 1	Little Cedar Rd.	Highland Center Rd.	7,130	D	14,200	E
US Hwy 52/State Hwy 1	Highland Center Rd.	3rd St. (Brookville)	15,710	F	22,700	F
US Hwy 52/State Hwy 1	3rd St. (Brookville)	4th St. (Brookville)	16,410	NA	23,500	NA
US Hwy 52/State Hwy 1	4th St. (Brookville)	5th St. (Brookville)	15,550	NA	22,600	NA
US Hwy 52/State Hwy 1	5th St. (Brookville)	St. Mary's Rd. (Brookville)	16,400	NA	23,400	NA
US Hwy 52/State Hwy 1	St. Mary's Rd. (Brookville)	10th St. (Brookville)	16,400	NA	23,000	NA
US Hwy 52/State Hwy 1	10th St. (Brookville)	State Hwy 1 (Jct. North)	17,790	NA	24,500	NA
US Hwy 52	State Hwy 1 (Jct. North)	Cliff St. (Brookville)	5,070	C	7,400	D
US Hwy 52	Cliff St. (Brookville)	McGuire Ridge (Metamora)	3,670	C	6,000	D
US Hwy 52	McGuire Ridge (Metamora)	State Hwy 229	3,760	C	6,100	D
US Hwy 52	State Hwy 229	State Hwy 121	3,390	C	4,500	C
US Hwy 52	State Hwy 121	Chapel Rd. & Elm Tree Rd.	1,770	B	1,900	B
US Hwy 52	Chapel Rd. & Elm Tree Rd.	State Hwy 244 (Andersonville)	2,680	B	2,800	C
US Hwy 52	State Hwy 244 (Andersonville)	County Line (West)	1,590	B	1,700	B

Source: Indiana Department of Transportation 1997 Average Daily Traffic

NA: LOS cannot be determined with existing data.

Map 6.1
Traffic Counts
1997

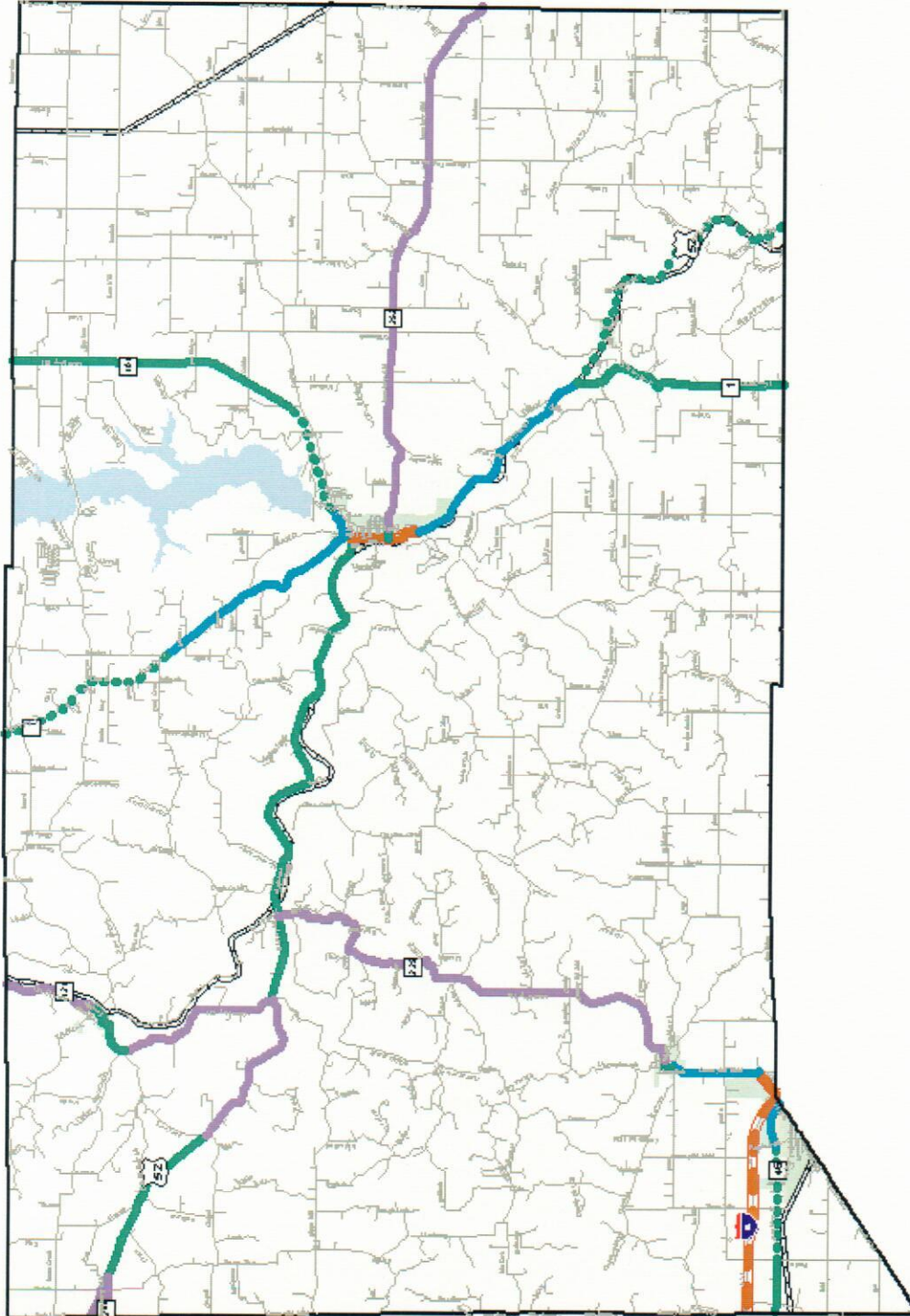
Average Daily
Traffic Counts

- 730-2,000
- 2,000-4,000
- 4,000-6,000
- 6,000-10,000
- More than 10,000

Railroads
Roads Without Counts
Brookville Reservoir
Cities & Towns

Source
Indiana Department
of Transportation

0 1 2 Miles



school buses and snow plows should these roadways ever be adopted by the County in the future.

3. Preserve scenic view corridors. The majority of the County's roads should remain scenic and winding, even if they are widened or shoulders are added. Those roads which are improved for higher speed and higher volume traffic should have design guidelines for building setbacks, building materials, and landscaping to ensure that even the main thoroughfares blend with the County's character.
4. Designate a number of primary thoroughfares for access to Brookville, Batesville, I-74, and Cincinnati, and upgrade those thoroughfares for higher usage with the intent that the availability of more direct routes will discourage commuter and tourism traffic from using the narrower county roads.
5. Require that transportation projects recognize and consider the scale and character of the surrounding community to protect the sense of place of each area. This is especially important regarding roadway improvements such as adding additional traffic lanes.

FUTURE TRAFFIC PROJECTIONS

Figure 6.1 displays future traffic projections for Franklin County highways. These future projections were made based on the expected population growth in the residential areas designated on the Future Land Use Map. According to the Institute of Transportation Engineers, the average single family home generates approximately 10 trips per day. Therefore, the projected future households were each projected to make 10 trips per day on major Franklin County roads. Most of those trips (approximately 90 percent) were anticipated to use a State or US Highway at some point along their route. While commercial and industrial uses also generate traffic, it was assumed that most of the traffic traveling to and from the projected future commercial and industrial locations would originate from a home within Franklin County. Furthermore, because it is unknown at this time what type of commercial uses and industrial uses will develop, no accurate traffic counts can be given. Finally, traffic projections in this report have been generalized. It is difficult to assume which route people will take to get to home, work, or school, and as some of the state highways become more congested, County Roads will likely become more widely used. However, for the sake of simplicity in projecting future demand, the aforementioned generalizations were made.

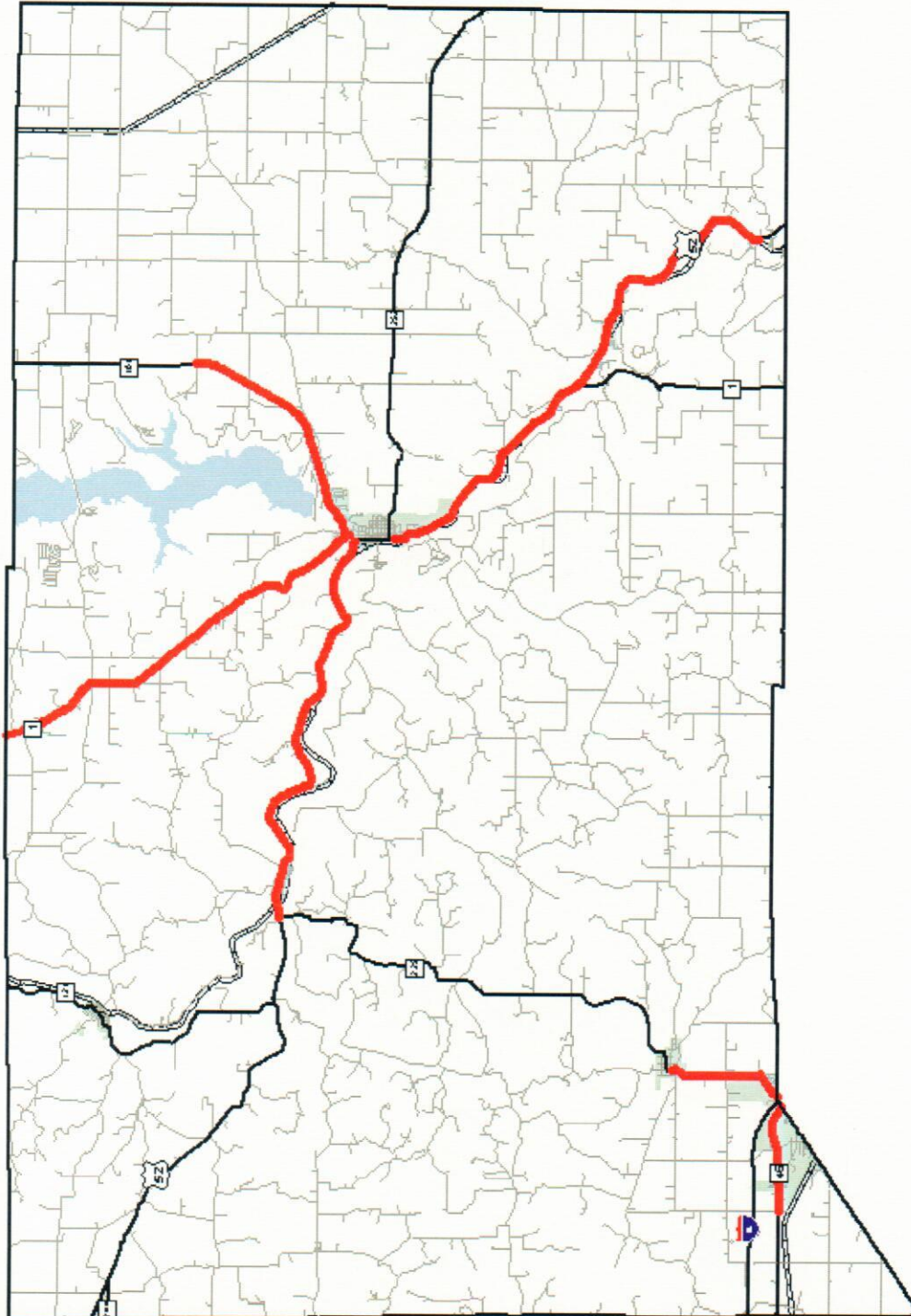
Map 6.2 highlights roadway segments that are projected to approach or exceed capacity by the year 2025. The following recommendations are suggested to alleviate existing and/or future congestion in those areas.

State Highway 46 & State Highway 229

Upon exiting I-74 onto State Route 229, drivers immediately face traffic congestion. This is due, in large part, to the fact that the interchange was designed for a rural area; but as the Batesville area develops, the exit ramps are required to accommodate more cars than they were designed to handle. Although it is undoubtedly needed, any redesign of the interchange is at the discretion of the Indiana Department of Transportation. Batesville has even gone as far as to recommend a second interchange to the east at Lammers Pike, in part to alleviate the congestion of the SR 229 exit. While

Map 6.2
Future Traffic
Concerns

-  Railroads
-  Rivers & Streams
-  Highways
-  Roadways with a projected LOS of D or worse
-  Brookville Reservoir
-  Cities & Towns



this decision is out of the County's jurisdiction, one solution is to improve an existing alternate route to exiting the interstate at 229. While a lot of those currently using that interchange do live in the Batesville area, this is also the most convenient exit for the central portion of Franklin County and Brookville for travelers coming from the west. There is an existing exit at State Highway 101 in Ripley County. Inter-County cooperation to improve the roadway from the exit ramps into Franklin County may make it a more attractive alternative to exiting the interstate at State Highway 229.

Furthermore, State Highway 46 and State Highway 229 are likely to face increased traffic concerns due to the number of residential dwellings being built immediately adjacent to the roadways. Limiting curb cuts, adding paved shoulders for vehicles to pass those making left turns, and requiring large developments to work with the state to install turn lanes will minimize the impact. See the general recommendations that follow on page 89. While much of SR 229 between Batesville and Oldenburg is already developed, any remaining land should be developed in accordance with these recommendations.

State Highway 229 will also face added traffic from residential uses along Pocket Road and from commercial uses proposed east of 229 and south of Pocket Road. As residential and commercial uses develop, there will likely be a need for a traffic signal at the intersection of Pocket Road and 229.

Finally, State Highway 46 may benefit from a third lane through Batesville (from the County line to Pocket Road in Franklin County), especially considering the added traffic and turning movements associated with the high school and the proposed industrial development. This third lane would be most beneficial if constructed as a continuous two-way median left turn lane, meaning the center lane could be used for left turns for traffic travelling in either direction. However, the recommended turn lane should not be interpreted as permission to allow curb cuts for every development. The road should become two lanes once more, west of Pocket Road.

US Highway 52: Between SR 229 and Brookville

Not much in terms of road widening can be accomplished along this stretch of road which is situated between a steep hillside and a river bed. Additional turning movements will only worsen conditions along this roadway, so new development should be limited, and where it does occur, it should make use of shared drives with paved shoulders for cars to pass those stopped and turning left. In the long term, more costly changes should include straightening out tight curves to assist in maintaining speed and to provide more sight distance for passing.

US Highway 52: South of Brookville

There are already segments of roadway south of Brookville that are facing congestion problems, likely due to the traffic volume associated with the convergence of SR 1 and US 52. Furthermore, the road is winding with little room on the hillside for passing lanes and/or road widening; and slow moving recreational vehicles and semi trucks can cause delays on the hills and in the curves. Recommendations for this segment of roadway are the same as for US 52 between SR 229 and Brookville, as stated above.

US 52 south of the junction with SR 1 (southbound) is likely to see increased traffic volumes as the southeastern corner of the County (Whitewater Township) continues to

develop. While much of this traffic currently uses County roadways to travel to Cincinnati, the inability of those roads to handle heavy traffic volumes may contribute to more commuters using US 52 and I-74. Keeping a number of alternate route options available is important in maintaining this stretch of highway. Thus, inter-county and inter-state decisions should be made concerning the roads in Whitewater Township as they meet roads in adjoining counties.

State Highway 1: North of Brookville

SR 1 and Reservoir Hill are designated in the Comprehensive Plan as residential growth areas. This area is already developing rapidly and has a need for turning lanes and paved shoulders leading to common drives. See the narrative below concerning general recommendations for more detail.

SR 1 also has designations for two commercial nodes, one at the intersection with Reservoir Hill and one in Blooming Grove. While the commercial node in Blooming Grove can be served with stop signs at crossroads in the immediate future, when new commercial development occurs along SR 1 at Reservoir Hill, a traffic signal with dedicated turning lanes should be installed to ensure that traffic leaving the commercial property can exit and traffic turning into the property does not slow traffic on SR 1.

State Highway 101

Traffic concerns along SR 101 are largely the result of three factors: Franklin County High School traffic (although limited to five days a week and specific hours of the day), recreational traffic (which is substantially heavier on summer weekends) and commercial traffic. Only a small portion of this traffic is passing through from origins or to destinations farther north. This roadway is proposed to develop into a more urban commercial area in the future and should be prepared for heavier traffic. However, there is a need to avoid turning it into one big commercial strip with curb cuts for every business. Such treatment would only result in more traffic congestion. Signalized intersections with designated turning lanes should be provided at intersections with Oxford Pike and Golden Road as well as with any sizable new developments. New development should be accessible through combined drives, and parking areas should be connected to other commercial developments to provide alternate access points.

Like Highway 46, SR 101 may require additional lanes in the future. However, the low number of existing curb cuts does not make this an immediate concern. The County should ease the expense and hassle of future roadway expansion by requiring setbacks that would allow for additional roadway width, and future commercial developers should be required to dedicate a strip of frontage to the County as additional right-of-way for future roadway expansion.

Additional County Roads

While existing traffic count data is only available for state highways, it is safe to assume that most of the County's road system will be influenced in some way by future growth. Furthermore, if the County's highways are being so negatively impacted, how much more can the County expect traffic problems on county roads which have not been widened or paved to more urban standards? Furthermore, much of the County's new development, especially in the southeastern part of the County, will have direct access

to County Roads. Therefore if travel on State Routes is projected to be high, it can be inferred that County roadways in the same areas will have similar traffic volumes. Roadways of particular concern are: Pocket Road, St. Mary's Road, Reservoir Hill, Oxford Pike, Johnson's Fork Road, Dorrell Road, Drewersburg Pike, and New Trenton Road. In the future, the general recommendations listed below should be considered on those roadways and as a general rule across the County.

GENERAL RECOMMENDATIONS

The planning analysis above shows that there will be approximately 52 miles of roadway that will have a deteriorated level of service (D or worse) by the year 2025, and yet Franklin County has limited financial resources to solve traffic problems on these roads. Therefore, the following general recommendations are suggested to alleviate congestion and other traffic problems at minimal expenses.

Limit Curb Cuts

On heavily traveled roadways, left turns can create large back-ups as drivers wait for on-coming traffic to clear so that they can make their turn. Even right turning movements can slow traffic for great distances as cars stack up behind the slower, turning vehicle. Limiting the number of turns therefore minimizes the amount of congestion on these rural highways. In many parts of the County, it is residential development that contributes to this congestion with numerous driveways. As was stated earlier, each residential home can generate an average of 10 trips per day, and these added trips add to the traffic volumes on County roads. This added volume makes turning movements into residential driveways, especially left turns, more difficult; and yet the more driveways that accumulate, the more turning will be required. Consolidating housing so that only one drive is required significantly limits the number of driveways on a County road, and when those homes are consolidated onto one drive or private road, a turn lane or passing shoulder can be added to the County Road to facilitate turning movements. This type of a solution would be costly where there were many drives to accommodate, but is much more feasible where drives are fewer and farther in between. This can be accommodated through the zoning and subdivision control ordinances to limit the number of curb cuts permitted on State and US Highways and/or on roadways designated by the County as arterials.

Increase Lane Width

With very little site distance and very narrow roadways, some County roads could become quite hazardous with future development. These roads are of particular concern in the southeastern portions of the County where the rolling terrain does not allow motorists to see on-coming cars until the distance between them is very short. While seldom traveled roads may function quite well at these narrow widths, in areas where on-coming traffic is consistent, roads should be wide enough for two-way traffic to flow without significant slowing or one vehicle pulling to the side of the road. Therefore, roadways within the designated residential growth areas on the Future Land Use map should undergo improvements to ensure lanes that are at least 12 feet in width. Yet because the cost is too high to widen all of these roads at once, the County will need to develop a policy determining which roads are of the highest priority for improvements. While this Plan can recommend specific roads that need attention (see the narrative on specific roadways above), the County will need to analyze the costs

involved to determine the timing of improvements. As different roadways are improved, they will naturally attract traffic, limiting the movement on narrower roads to primarily local residents who live along those roads. Roadways designated for improvements as well as the timing of improvements should be reevaluated as development continues to occur, as the exact pattern that future development will take is difficult to accurately predict at this time.

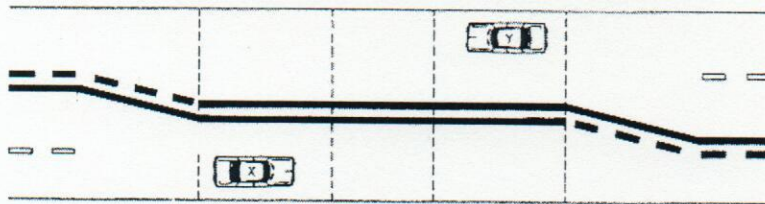
Finally, as these areas develop, required building setback lines should be set so that as the County can afford improvements, they can be done with little disturbance to existing development. Furthermore, the County will require that new developments dedicate necessary right-of-way to the County for future road widening efforts.

Provide Additional Lanes

A common solution to traffic congestion is to simply add more lanes to a roadway. This may seem logical since more lanes can obviously carry more traffic. However, adding lanes is costly, and in many locations in Franklin County, it is extremely difficult due to the constraints of the geography of the land. While it is recommended that a third lane be added to SR 46 (see narrative above), the recommendation for additional lanes throughout other areas of the County is limited to spot treatments to allow vehicles to pass. One of the greatest factors that contributes to traffic congestion on two lane rural highways is the ability to pass slow moving vehicles or vehicles that are stopped to make left turns. When approaching traffic volumes are high and when sight distances are short, travelers often find themselves trapped behind a semi that slows as it climbs a hill or a recreational vehicle that must slow down to handle the curves. Throughout the County, the most beneficial additional "lane" is a paved shoulder. Paved shoulders allow slow moving vehicles to move off the road and allow cars to pass them by. They also provide a means for vehicles to pass cars that are stopped in the traffic lane while maneuvering a left turn. Furthermore, they provide added width for farm machinery so that large farm vehicles do not take up both travel lanes. Shoulder paving should take place first on roads with existing heavy traffic volumes (see narratives above) and as spot treatments in areas where large farm machinery is often present, where steep inclines slow traffic, or where large residential or business developments are creating an elevated number of left turns.

In the future as traffic increases on some of the more heavily traveled segments of County highways, passing lanes may be added to assist in the traffic flow. US Highway 52 is a prime candidate for such treatment because of the difficulty and cost associated with widening the road to more than two lanes for any great distance. Passing lanes can be placed periodically to allow faster moving vehicles to pass other vehicles on the road and to space out traffic before the highway is once again reduced to two lanes. See the diagram below for an example of a passing lane on a two lane highway.

FIGURE 6.2: PASSING LANE ON A TWO LANE HIGHWAY²



The "Do Nothing" Solution

The nature of Franklin County's roads naturally reduces the level of service, especially in the western portion of the County. Level of service is largely a factor of the speed a motorist can maintain and how easily cars can pass slower moving vehicles, and Franklin County's roadways lend themselves to lower speeds and many stretches of no passing zones. Therefore, actual roadway conditions should be considered in addition to the LOS figures. Treatments to reduce congestion will likely be very different throughout the County, and in some areas there may not be practical solutions to improving the level of service, such as on roads constructed on steep hillsides where there is not room for more lanes or turning areas without potentially destructive work to the hillside. In such cases, simply limiting development and/or improving other roadways to entice drivers to other routes may be the only options.

SPECIAL STUDY AREAS

The intent of Comprehensive Planning is to make generalized future projections and recommendations for managing growth. While these projections and recommendations are very beneficial in determining where growth should occur and the manner in which it should occur, there are many aspects of growth that require further study and the development of more detailed planning. Roadway design is one such area. Where solving serious traffic concerns or constructing new roadways are involved, a County would be wise to undertake more specific, detailed planning rather than relying on the generalizations of a Comprehensive Plan. Therefore, the following areas deserve further study in the future.

Downtown Brookville

In projecting future growth for Brookville, the assumption was made that approximately 638 additional homes will be built along State Route 101 and Reservoir Hill between Brookville and Blooming Grove. Further, it is projected that most of those household trips will require travel through downtown Brookville. While this assumption may generate artificially high traffic volumes, it also assumes that only 20 percent of the residential area designated on the future land use map will be developed by the year 2025. Therefore, if development occurs more rapidly in this area than is anticipated, the traffic counts projected will be very accurate and perhaps even low.

The current traffic volumes through downtown Brookville average between 15,550 and 17,790 vehicles per day. While that volume appears high, it is typical to see an ADT of 22,000 to 23,000 for two lane roads in urban areas. However, for traffic to flow properly at those volumes requires ideal conditions. The lack of turn lanes, the presence of trucks, and on street parking all slow that traffic down in Brookville, leading to problems with congestion. While existing traffic flows in Brookville are high, it is most likely the signalized intersections that are causing the problems in the traffic flow.

Therefore, the greatest benefit for traffic movement on US 52/State Highway 1 through downtown Brookville will be improvement of how well the signalized intersections function. Downtown Brookville currently has four signalized intersections: Main

² Institute of Traffic Engineers (1992), *Highway Capacity Manual*.

Street/Butler Avenue and SR 101, Main Street and 6th Street, Main Street and 5th Street, and Main Street and 4th Street (SR 252). Without a detailed traffic study, it is difficult to determine where the flow breakdown begins to occur, but experience pinpoints some troubled areas. The intersection where US 52 splits off of Main Street to the northwest is a problematic intersection. Northbound traffic on US 52 does not stop, leading to back-ups on southbound Main Street; and the configuration can be confusing to those unfamiliar with it. Further traffic analysis should be conducted to determine the need for a traffic signal at this location.

Three signalized intersections are spaced one block apart on Main Street at 4th, 5th, and 6th Streets. These lights should be timed to allow traffic to flow properly and to ensure that intersections do not become blocked when the lights change to red. However, the most significant problem at these and other downtown intersections are left turning movements. On-coming traffic is generally consistent enough to nearly eliminate the possibility of turning left on a green light, and on-street parking makes it impossible for through traffic to pass the turning vehicle, leading to congestion and frustrated drivers. While this Plan recommends further study of the Downtown Brookville traffic patterns before any reconstruction is planned, one preliminary recommendation is to provide dedicated left turn lanes at intersections where left turns are most prevalent, presumably at the existing signalized intersections where left turns are necessary for southbound traffic to access the County Courthouse and SR 252. The development of turn lanes will require the loss of some on-street parking spaces. How long those lanes should be (and how many spaces would be lost as a result) should be a subject of a more detailed engineering study, as should additional traffic concerns within Brookville.

New Corridors

Given the projected growth of Franklin County and the increase in demand for travel that growth will incur, the County may wish to invest in the improvement of improved transportation corridors.

Travel Around Brookville

In general, rural highways seldom reach capacity because demand is rarely very high in these areas. However, the one common exception is in areas where recreational uses increase that demand on weekends. Brookville Reservoir has had that effect on the traffic in Downtown Brookville. Long delays are common through the downtown in the summer months, especially on the weekends when recreational traffic increases.

While traffic signalization changes within Brookville may alleviate much of the traffic congestion on Main Street, summer weekends will likely always create problems. Furthermore, truck traffic traveling through downtown can create backups as it takes trucks longer to regain speed after stopping at traffic lights. Therefore, in order to alleviate traffic congestion caused by truck traffic, recreational traffic, and other car traffic that is simply passing through Brookville, questions have been raised as to the appropriateness of another route around Brookville.

The proposal for an improved roadway around Brookville was first introduced in the 1964 Comprehensive Plan for Franklin County. The proposed alignment was along Holland Road connecting SR 1/US 52 at the south end of Brookville to SR 101 at the north end of Brookville. A roadway alignment that allowed through traffic to bypass

Brookville was considered "a most essential improvement" by the Plan. However, constructing a new road corridor of such great length through Franklin County's hilly terrain would be a costly project, and because its necessity was not widely held to be true, this connector was never constructed.

One of the greatest factors weighing on the decision of whether or not to divert recreational and truck traffic around the Town is its effect on the downtown business district. An easier travel route is likely to attract more than just weekend recreators and truck drivers, and if traffic is diverted from downtown, those downtown businesses will lose their most valuable form of advertisement: visibility. Additionally, heavily traveled corridors often have the effect of attracting business of their own. Where the traffic goes, the commercial development often follows, leaving businesses downtown either unable to compete with the new business on the corridor or closing shop in downtown to move out to the new road. Brookville is still a viable downtown, and its vitality is a major concern for County residents.

Therefore, the debate continues with this Comprehensive Plan as to the necessity for a road designed to divert traffic around Brookville. The recommendation of this report is that no specific alignment for such a roadway be presented at this time. Instead, the Town and County should consider the following course of action:

- First, improvements should be made to downtown Brookville to alleviate the traffic congestion that is caused by problematic intersections. The addition of turn lanes and the coordination of traffic lights is likely to alleviate weekday traffic congestion.
- Second, although it can be a nuisance, recreational traffic will continue to be a reality on weekends and throughout the summer. Even with another route, many visitors are likely to travel through Brookville to experience the character of the Town. Decisions on whether or not another roadway is necessary should not be based solely on the traffic patterns on the weekends.
- In the long term, beyond the 20-30 year time frame of this Plan, Franklin County may need to construct a new north/south transportation route around Brookville's downtown. Increased commercial development on SR 101 will result in increased traffic, some of which will be truck traffic delivering retail goods to new commercial establishments. Increased tourism will likewise add to traffic volumes traveling north/south in the County from I-74 to the area around Brookville Reservoir. Finally, because Brookville is the educational center of the County, new students from throughout the County, and especially Whitewater Township, will need good access to educational facilities.

Therefore, while the demand for a new road does not currently justify the expense, the need is likely to increase as the County grows. For this reason, Franklin County should not eliminate the possibility of developing a corridor in the future by allowing development to strip out the most appropriate alignment for the road. While further study will be necessary to determine the precise location and alignment of a new corridor, Franklin County should encourage all new development to dedicate right-of-way to the County, to maintain setbacks that would not impede the construction of a new roadway, and to avoid stripping out the existing road corridors with excessive private driveways.

Travel Between Brookville and Batesville

As major population centers in Franklin County, Brookville and Batesville are common destinations for travel. As such, it is logical for there to be a convenient, easily traveled roadway corridor between the two. However, the topography and agricultural makeup of the southwestern portion of the County has resulted in winding, narrow roadways which are anything but direct.

As the population of the County increases, so too will travel through this area, increasing the necessity for a convenient, safe corridor from Brookville to Batesville. St. Mary's Road is currently the widely accepted route for this trip. However, like most of the roads in this portion of the County, St. Mary's was designed for use as a rural road for local traffic and is therefore narrow and winding. As travel in this corridor increases, the County should investigate measures to upgrade the roadways through this area to meet increased travel demands. This may mean improvements to St. Mary's road, but the County should explore other options as well. Of prime concern is where to tie those improvements into Batesville. One option would be to complete improvements of St. Mary's Road to Oldenburg. However, that would result in increased traffic through the small town. Another option is to improve travel conditions on St. Mary's Road from Brookville to Sunman Road. From that point improvements could be made to Sunman Road, south to the County Line. As the future land use plan is targeting this area for future industrial development, travel conditions in on Sunman Road will require improvement regardless of what improvements are made to St. Mary's Road. Therefore, using this connection to I-74 may be a more cost effective alternative than improving St. Mary's road to Oldenburg. From Sunman Road, vehicles could access Batesville via I-74 or SR 46 in Ripley County.

In Summary

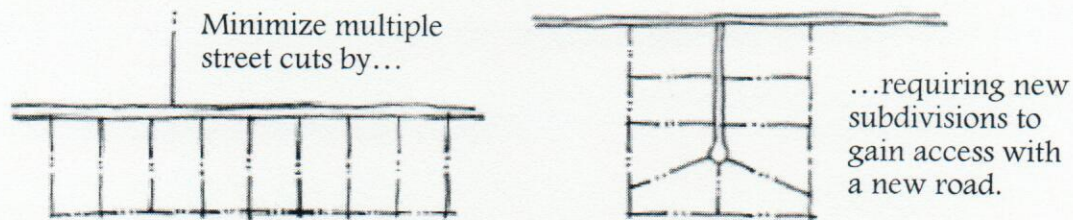
Because of the cost and time involved in roadway planning, in order for recommendations for new roadways to be made, the County will need more information than a Comprehensive Plan can supply. A traffic study should be conducted to determine the demand for roadways around Brookville and from Brookville to Batesville, as well as to identify possible funding sources. Furthermore, any roadway studies should have a land use and zoning component to ensure that a roadway to the east of Brookville would not negatively impact the Downtown Business District and to ensure that roadway improvements through rural southwestern Franklin County would not be detrimental to the rural character of the area.

TRANSPORTATION POLICIES

In addition to the specific recommendations given above, the following policies should be implemented County-wide.

1. Develop a comprehensive, County-wide thoroughfare plan for addressing traffic congestion on County Highways and for determining which roadways will require improvements to move greater volumes of traffic and which roadways should remain rural and scenic. The thoroughfare plan should incorporate requirements for road widths and right-of-way widths, and these requirements should be made consistent with updates to the setback requirements of the zoning ordinance and the roadway requirements of the subdivision control ordinance.

2. Provide paved shoulders or wider lanes to accommodate agricultural and residential traffic in rural development areas. Newly constructed local streets should be 24 feet back of curb to back of curb with a 60 foot right-of-way.
3. Discourage roadway expansion projects in agricultural areas that would make these areas more desirable for residential development due to quicker commuting times created by the improvements.
4. Require all new developments to dedicate and/or improve adequate right-of-way for future widening efforts.
5. Avoid strip development by requiring multi-lot subdivisions to gain access with a new private road or access easement.



6. Require that private streets be built to the County's construction standards for public streets.
7. Require sidewalks along both sides of the road within commercial areas and residential areas where the density is more than 4 dwellings per acre. In residential areas where the density is 1-4 dwellings per acre, provide sidewalks along one side of the road.
8. Identify roadways for improvement to better link Brookville and Batesville/I-74. Consider St. Mary's Road and roadways which link Brookville with the I-74/SR 101 interchange. Improvements on these roads should be similar to those recommended above for County highways.
9. Conduct a traffic study to analyze traffic conditions in Downtown Brookville. Such study may be expanded at a later date to analyze the need for a new route around Brookville.

Development Policies for New Residential Subdivisions

The following policies apply to areas designated for Smaller Lot Housing and Suburban Housing on the Future Land Use Map.

1. Provide vehicular connections between subdivisions and commercial areas to reduce the number of short trips occurring on County highways.
2. Require adjoining subdivisions to have vehicular and pedestrian connections to each other.

3. Require five-foot (5') wide sidewalks on both sides of the street in new subdivisions with a density equal to or greater than 1 dwelling per acre.
4. Seek to construct sidewalks within existing subdivisions with densities of 1 dwelling per acre or greater.
5. Where possible, newly constructed sidewalks should connect to existing development.
6. New neighborhoods should use traffic calming measures such as:
 - Roadway narrowing
 - Roundabouts
 - Neck-downs
 - Medians
 - T-intersections